## **Amendments to the Claims:**

This listing of the claims will replace all prior versions/listings of claims in the application:

## **Listing of Claims**

1. (Original) An apparatus for processing a near-baseband, received digitized television signal comprising:

a video carrier recovery circuit adapted to:

receive a video carrier recovery circuit input signal, said video carrier recovery circuit input signal including a video carrier signal;

detect a phase offset of said video carrier signal;

generate a phase adjustment signal based on said phase offset;

produce a video carrier recovery circuit output signal from said video carrier recovery circuit input signal and said phase adjustment signal;

a filter circuit to:

receive a filter circuit input signal, said filter circuit input signal including components in a frequency range that is expected to contain a digitized audio signal;

produce a filter circuit output signal excluding said components in said frequency range; and

a selection circuit adapted to switch between:

a first configuration, wherein said near-baseband, received digitized television signal is said video carrier recovery circuit input signal and said video carrier recovery circuit output signal is said filter circuit input signal; and

a second configuration, wherein said near-baseband, received digitized television signal is said filter circuit input signal and said filter circuit output signal is said video carrier recovery circuit input signal.

- 2. (Original) The apparatus of claim 1 wherein said filter circuit comprises a low pass finite impulse response digital filter.
- 3. (Original) The apparatus of claim 1 wherein said video carrier recovery circuit is further adapted to produce an indication of a frequency offset and said apparatus further comprises a down-converter adapted to:

receive an offset-from-baseband digitized television signal;

receive said indication of said frequency offset from said video carrier recovery circuit; and

based on said indication of said frequency offset, frequency shift said offset-frombaseband digitized television signal by said frequency offset.

- 4. (Original) The apparatus of claim 3 wherein said filter circuit input signal includes further components in a second frequency range, said second frequency range expected to contain said digitized video signal and wherein said filter circuit further comprises a second filter adapted to produce a second filter circuit output signal excluding said further components in said second frequency range.
- 5. (Original) The apparatus of claim 4 wherein said second filter comprises a high pass finite impulse response digital filter.
- 6. (Original) The apparatus of claim 5 further comprising a video signal processor adapted to process said filter circuit output signal and produce a digital composite video baseband signal according to a predetermined standard.
- 7. (Original) The apparatus of claim 6 wherein said predetermined standard is the

Appl. No. 10/812,279 Amdt. dated June 9, 2008

Reply to Office Action mailed December 7, 2007

National Television System Committee standard.

8. (Original) The apparatus of claim 6 wherein said digitized video signal processor is

adapted to determine a position for a peak of a horizontal synchronization pulse for

said digital composite video baseband signal.

9. (Original) The apparatus of claim 8 further comprising a front-end gain control

circuit adapted to generate a gain control signal based on a characteristic of said

digitized television signal and an indication of said position for said peak of said

horizontal synchronization pulse.

10. (Currently Amended) A method of processing an analog television signal

comprising:

converting said analog television signal to a digitized television signal having a

frequency offset relative to baseband;

in a first mode of operation,

reducing said frequency offset to produce a near-baseband digitized television

signal having a residual frequency offset;

producing a first mode residual signal representative of said residual frequency

offset of said first mode near-baseband digitized television signal;

based on said first mode residual signal representative of said residual

frequency offset, reducing said frequency offset to produce a first-mode

nearer-to-baseband digitized television signal; [[and]]

filtering said first mode nearer-to-baseband digitized television signal to

produce a first mode first filter output signal having components restricted to a

first in a frequency range, where said first frequency range is expected to

contain an audio signal;

Page 4 of 10

## in a second mode of operation,

reducing said frequency offset to produce a second mode near-baseband digitized television signal having a residual frequency offset;

filtering said second mode near-baseband digitized television signal to produce a second mode first filter output in a frequency range expected to contain an audio signal, and a second mode second filter output signal, in a frequency range expected to contain a digitized video signal;

producing a second mode residual signal representative of said residual frequency offset of said second mode near-baseband digitized television signal from said second mode second filter output signal;

based on said second mode residual signal, reducing said frequency offset to produce a second mode nearer-to-baseband digitized television signal.

- 11. (Currently Amended) The method of claim 10 further comprising filtering said <u>first mode</u> nearer-to-baseband digitized television signal to produce a <u>first mode</u> second filter output signal having components restricted to a <del>second</del> frequency range, where said second frequency range is expected to contain a digitized video signal.
- 12. (Currently Amended) The method of claim 11 further comprising demodulating said <u>first mode</u> second filter output signal to produce a digital composite video baseband signal according to a predetermined standard.
- 13. (Original) The method of claim 12 wherein said predetermined standard is the National Television System Committee standard.
- 14. (Currently Amended) A television signal reception system comprising:
  - a tuner adapted to shift an analog television signal associated with a radio frequency carrier to an analog television signal at an intermediate frequency;

Reply to Office Action mailed December 7, 2007

a variable gain amplifier;

an analog to digital converter adapted to produce a digitized television signal

having a frequency offset relative to baseband, where said digitized television

signal is based on said analog television signal at said intermediate frequency;

a separator including:

a video carrier recovery circuit adapted to detect said frequency offset and

produce an indication of said frequency offset;

a mixer, responsive to receipt of said indication of said frequency offset,

adapted to reduce said frequency offset to produce a near-baseband digitized

television signal; [[and]]

a filter adapted to filter said near-baseband digitized television signal to produce a

digitized sound signal;

a second filter to filter said near-baseband digitized television signal to produce a

digitized video signal;

a video processor adapted to produce a digital component video baseband signal

based on said digitized video signal;

wherein said separator and said video processor are further adapted to produce a

control signal for said variable gain amplifier to maintain characteristics of said

analog television signal at said intermediate frequency within a range acceptable

to said analog to digital converter, where said control signal is based on said

digital component video baseband signal.

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

Page 6 of 10

- 18. (Original) The reception system of claim 14 wherein said control signal is based in part upon a position for a peak of a horizontal synchronization pulse in said digital component video baseband signal.
- 19. (Original) The reception system of claim 18 wherein said control signal is based in part upon a target metric of said digital television signal at the output of said analog to digital converter.
- 20. (Original) The reception system of claim 19 wherein said target metric is peak amplitude.
- 21. (Original) The reception system of claim 19 wherein said target metric is peak power.
- 22. (Original) An apparatus for processing a near-baseband, received digitized television signal comprising:
  - a video carrier recovery circuit including:
    - a video carrier recovery circuit input port to receive a video carrier recovery circuit input signal, said video carrier recovery circuit input signal including a video carrier signal;
    - a phase error detector to detect a phase offset of said video carrier signal;
    - a loop filter to generate a phase adjustment signal based on said phase offset;
    - a video carrier recovery circuit output port to provide a video carrier recovery circuit output signal from said video carrier recovery circuit input signal and said phase adjustment signal;
  - a filter circuit including:

a filter circuit input port to receive a filter circuit input signal, said filter circuit input signal including components in a frequency range that is expected to contain a digitized audio signal;

a filter to produce a filter circuit output signal by excluding said components in said frequency range; and

a filter circuit output port to transmit said filter circuit output signal;

a first selection switch to receive first received signals including said nearbaseband, digitized television signal and said filter circuit output signal and pass one of said first received signals to said video carrier recovery circuit input port; and

a second selection switch to receive second received signals including said nearbaseband, digitized television signal and said video carrier recovery circuit output signal and pass one of said second received signals to said filter circuit input port.